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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/068,023 | 02/08/2002 | Sunil K. Gupta | 29250-000558 | 7214 |
| 30594 | 7590 | 11/14/2005 | EXAMINER | |
| HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195 | | | TRAN, PHUC H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2668 | |

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/068,023 | GUPTA ET AL. | |
| | Examiner | Art Unit | |
| | PHUC H. TRAN | 2668 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/8/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 8-9 and 19-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- Regarding to claims 8-9 and 19-20, “the buffer manager measures a distance between earliest detected out of sequence packet and a beginning of the buffer, and the buffer manager controls the playback device to decrease the playback speed when the distance is less than a predetermined distance” was not described “the distance” in the specification in such a way as to reasonable convey to one skilled in the relevant art at the time the application was filed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-7, 10-18 and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Sholmot (U.S. Patent No. 6377931 B1).

- With respect to claims 1,15, Sholmot teaches a system to compensate for the effects of packet delay on a voice over Internet protocol (VOIP) system, comprising:

- a buffer for receiving speech packets in the VOIP system (block 260 in Fig. 2, col. 4, lines 41-43);

- a playback device for adjusting the playback speed of the received speech packets (block 232 in Fig. 2);

- and a buffer manager (270 in Fig. 2) for detecting packet jitter in the buffer and for sending commands to the playback device to adjust playback speed based on the detection (bridge paragraph between col. 4 & 5).

- With respect to claim 2, Sholmot teaches wherein the buffer is a queue for handling incoming speech packets (e.g. jitter buffer in Fig. 2), the buffer performing jitter buffering and packet sequencing on the received speech packets (col. 4, lines 38-41).

- With respect to claim 3, Sholmot also teaches wherein the buffer manager controls the playback device to decrease the playback speed when the buffer manager detects packet jitter

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that delays arrival of a speech packet (e.g. when the arrival of the packet from the network 100 is underflow, the buffer manager provides a slow-play signal to 280 in Fig. 2).

- With respect to claim 4, Sholmot discloses wherein the buffer manager controls the playback device to increase the playback speed when the delayed packet arrives at the buffer (e.g. when buffer manager receives overflow, it signals fast-play to 208 in Fig. 2).

- With respect to claims 5, 13 & 17, Sholmot further teaches wherein packet jitter is a variation in packet delay that causes packets to arrive out of sequence at an end-point in the system (col. 4, lines 19-22).

- With respect to claims 6, & 14, Sholmot teaches wherein an end-point is a client in the system (e.g. Fig. 1).

- With respect to claims 7, & 18, Sholmot also teaches wherein the buffer manager checks length of the buffer and instructs the playback device to increase playback speed until the length of the buffer returns to a nominal length, when the buffer manager determines that length of the buffer exceeds a specified length (e.g. depending on the level capacity of the buffer to increase or decrease the playback as Fig. 2).

- With respect to claim 10, Sholmot teaches wherein the buffer manager includes silence compression means that uses silence periods that are received between speech packets in the buffer to restore the length of the buffer to a nominal length (col. 1, lines 33-35).

- With respect to claim 11, Sholmot discloses wherein the buffer manager compresses the silence periods to return playback speed to a nominal speed (col. 2, lines 60-63).

- With respect to claim 12, Sholmot teaches wherein the buffer manager controls the playback device to adjust speed by an amount that is dependent on an expected or observed

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packet jitter (e.g. Fig. 2 shows that the buffer manager adjust the speed base on the overflow or underflow of buffer jitter).

- With respect to claim 16, Sholmot teaches further comprising performing jitter buffering and packet sequencing on the speech packets prior to performing the detecting step (e.g. col. 2, lines 39-45).

- With respect to claim 21, Sholmot teaches further comprising the step of restoring the length of a buffer storing the incoming speech packets to a nominal length, at a nominal playback speed, instead of at a higher playback speed, thereby compressing any silence intervals (col. 2, lines 48-51).

- With respect to claim 22, Sholmot teaches wherein the compressing step is performed when silence suppression is enabled in the VoIP system (col. 1, line 43-46).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Simard et al. (U.S. Patent No. 6956828 B2) discloses apparatus and method for packet-based media communications.
- Shaffer et al. (U.S. Patent No. 6683889 B1) discloses apparatus and method for adaptive jitter buffers.
- Chow (U.S. Patent No. 6944174 B1) discloses jitter reduction of voice packets in a packet-based network.

- Scott (U.S. Patent No. 6665317 B1) discloses method, system, and computer program product for managing jitter.
- Kramer et al. (U.S. Patent No. 6658027 B1) discloses jitter buffer management.

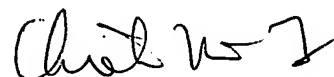
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
11/7/05



CHIEH M. FAN
PRIMARY EXAMINER